

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:
Listing of Claims:

1. (Currently Amended) In a computing environment, a method for regulating the amount of bandwidth consumed by a plurality of download network connections by limiting the number of simultaneous connections to a download server, the method comprising:

(a) communicating a content-related request to a download service, and in response to the content-related request, receiving download regulation data corresponding to an acceptance value and a time-window set containing at least one time value;

(b) determining based on the a-current acceptance value received in response to the content-related request whether to request the content or whether to delay back-off for a wait time before communicating another content-related request~~requesting the content~~, the wait time corresponding to a wait time value in the time-window set; and

(i) when the determination result is to request the content, downloading the content for not more than the duration of a download time, and if the download is not completed within the download time, repeating steps (a) and (b) until the download is finished, the download time corresponding to a download time value in the time-window set, and

(ii) when the determination result is to back off, waiting for a duration of time specified by the wait time and then repeating steps (a) and (b) until the download is finished~~delaying downloading of the content for the wait time~~.

2. (Previously Presented) The method of claim 1 wherein the download time value and the wait time value both correspond to the same time value in the time-window set.

3. (Previously Presented) The method of claim 1 wherein receiving said download regulation data corresponding to said acceptance value and said time-window set comprises receiving a URL to a download regulation file.

4. (Original) The method of claim 1 wherein determining whether to request the content or whether to back off comprises, generating a random number and comparing the random number with a number corresponding to the acceptance value.

5. (Canceled).

6. (Canceled).

7. (Previously Presented) The method of claim 1 further comprising setting the wait time corresponding to the wait time value in the time-window set by obtaining the wait time value from the time-window set and varying the obtained wait time value by a random time amount.

8. (Previously Presented) The method of claim 1 further comprising setting the download time corresponding to a download time value in the time-window set by obtaining the download time value from the time-window set and varying the obtained download time value by a random time amount.

9. (Currently Amended) The method of claim 1 wherein the determination result is to back off, and wherein after delaying downloading of the content for the wait time, further comprising, obtaining another acceptance percentage value from the download regulation data, setting that other acceptance percentage value as the current acceptance percentage value, and repeating step (b).

10. (Original) A computer-readable medium having computer-executable instructions, which, when executed, perform the method of claim 1.

11. (Currently Amended) In a computing environment, a method of regulating access to content, comprising:

receiving a content-related request, and in response, providing download regulation data comprising at least one probability value that directs which clients can download the content, wherein access to the content is regulated by said clients determining from the probability value whether to download the content or wait until later to download the content, and a time-window set containing at least one time value, wherein a time value contained within the time-window set specifies a maximum length of time a client may download content corresponding to the content-related request; and

updating the download regulation data provided in response to subsequent content-related requests based on network load.

12. (Canceled)

13. (Previously Presented) The method of claim 11 wherein the time window set contains a delay time specifying for at least how long said clients that determine to wait are to delay.

14. (Canceled)

15. (Previously Presented) The method of claim 11 wherein each probability value corresponds to a percentage, and wherein access to the content is regulated by said clients determining from the probability value whether they meet a threshold based on the percentage.

16. (Previously Presented) The method of claim 11 wherein the said download regulation data contains at least first and second probability values, and wherein said clients that have not waited determine from the first probability value whether to download or wait, and said clients that have waited determine from the second probability value whether to download or further wait.

17. (Previously Presented) The method of claim 11 wherein updating the said download regulation data based on network load comprises obtaining information corresponding to regional load, and wherein providing download regulation data comprises said clients with a download regulation data file corresponding to each client's region.

18. (Currently Amended) A computer-readable medium having computer-executable instructions, which, when executed, perform ~~the method of claim 11~~; a method of regulating access to content, the method comprising:

receiving a content-related request, and in response, providing download regulation data comprising at least one probability value that directs which clients can download the content, wherein access to the content is regulated by said clients determining from the probability value whether to download the content or wait until later to download the content, and a time-window set containing at least one time value, wherein a time value contained within the time-window set specifies a maximum length of time a client may download content corresponding to the content-related request, wherein the same download regulation data is provided to all client request; and

updating the download regulation data provided in response to subsequent content-related requests based on network load.

19. (Currently Amended) A computer-readable medium having stored thereon a data structure for regulating the downloading of content to a plurality of clients, the method comprising:

a first set of data corresponding to an acceptance value, the acceptance value corresponding to a single probability value that regulates the percentage of the plurality of clients that will start a download immediately after evaluating the acceptance value;

a second set of data corresponding to at least one time value; and

wherein the data structure is configured to be returned to a client in response to a content-related request, and for the client determines to determine from the acceptance value in the first set of data whether to request the content immediately and proceed to download the content for a length of time not to exceed a download time or whether to back off for a wait time before performing an additional content-related request~~requesting the content~~, the download time corresponding to a download time value in the second set of data and the wait time corresponding to a wait time value in the second set of data.

20. (Currently Amended) In a computer network having unmanaged clients, a system comprising:

means for determining whether a software update is needed;

means for requesting the software update in response to a determination that a software update is needed~~when needed~~;

means for receiving a download regulation file in response to the request for the software update; and

means for processing the download regulation file to determine whether to download the software update immediately for a duration not to exceed a time determined by the processing of the download regulation file or wait until a later time to perform an additional content-related request~~download the software update~~, including means for generating a random number and means for comparing the random number against an acceptance value in the download regulation file.

21. (New) The method of claim 1, wherein the download regulation data received in response to the client request is the uniform across all clients and is independent of the clients identity.